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Morimoto et al.

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(54) **ERYTHROMYCIN A DERIVATIVES AND  
METHOD FOR PREPARING SAME**

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**Related U.S. Application Data**

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(30) **Foreign Application Priority Data**

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(51) Int. Cl.<sup>7</sup> ..... C07H 1/00

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(58) Field of Search ..... 536/7.2, 7.3, 7.5, 536/18.5; 514/29

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,640,910 A \* 2/1987 Fausl et al. ..... 514/29  
4,670,549 A \* 6/1987 Morimoto et al. ..... 536/7.4

**FOREIGN PATENT DOCUMENTS**

EP	0063489	10/1982
EP	0158467	* 10/1985
EP	0201166	11/1986
EP	0222353	5/1987 ..

**OTHER PUBLICATIONS**

Kirk-Othmer, Encyclopedia of Chemical Technology, 3<sup>rd</sup> ed, vol. 20, published 1982 pp 964-965.\*

Kirk-Othmer, Encyclopedia of Chemical Technology, Third Ed., (New York, John Wiley & Sons), 20, pp. 964-965 (1982).\*

Kirk-Othmer, Encyclopedia of Chemical Technology, Third Ed., (New York, John Wiley & Sons), 20, pp. 964-965 (1982).\*

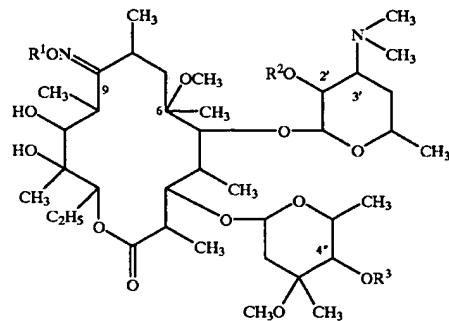
\* cited by examiner

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(57) **ABSTRACT**

Erythromycin A derivatives represented by the general formula



wherein R<sup>1</sup> is a 2-alkenyl group having 3 to 15 carbon atoms, an arylmethyl group, or an arylmethyl group substituted by 1 to 3 of a halogen atom, an alkoxy group 1 to 4 carbon atoms, a nitro group or an alkoxy carbonyl group having 2 to 6 carbon atoms, R<sup>2</sup> is a substituted silyl group and R<sup>3</sup> is a hydrogen atom or R<sup>2</sup>, are disclosed. These compounds are useful as intermediates of the anti-bacterial agents.

1 Claim, No Drawings